

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Withdrawn) An isolated Nope polypeptide, or functional fragment thereof, comprising the amino acid sequence of a Nope polypeptide (SEQ ID NO:2), or a modification thereof.
2. (Withdrawn) The isolated Nope polypeptide of claim 1, wherein said functional fragment comprises the amino acid sequence of a Nope polypeptide extracellular domain (SEQ ID NO:4).
3. (Withdrawn) The isolated Nope polypeptide of claim 2, wherein said functional fragment comprises an amino acid sequence selected from the group consisting of immunoglobulin domain 1 (SEQ ID NO:8), immunoglobulin domain 2 (SEQ ID NO:10), immunoglobulin domain 3 (SEQ ID NO:12), immunoglobulin domain 4 (SEQ ID NO:14), fibronectin domain 1 (SEQ ID NO:16), fibronectin domain 2 (SEQ ID NO:18), fibronectin domain 3 (SEQ ID NO:20), fibronectin domain 4 (SEQ ID NO:22), and fibronectin domain 5 (SEQ ID NO:24).
4. (Withdrawn) The isolated Nope polypeptide of claim 1, wherein said functional fragment comprises the amino acid sequence of a Nope polypeptide intracellular domain (SEQ ID NO:6).
5. (Withdrawn) An antibody that specifically binds the Nope polypeptide of claim 1.
6. (Withdrawn) The antibody of claim 5, wherein said antibody is a polyclonal antibody.
7. (Withdrawn) The antibody of claim 5, wherein said antibody is a monoclonal antibody.
8. (Withdrawn) A method of detecting a Nope polypeptide, comprising contacting a sample with the antibody of claim 5, and detecting specific binding of said antibody.

9. (Currently amended) An isolated nucleic acid molecule encoding a Nope polypeptide having the amino acid sequence referenced as SEQ ID NO:2 and having a Nope polypeptide activity, ~~or a modification of the encoding nucleic acid sequence.~~

10. (Previously presented) The isolated nucleic acid molecule of claim 9 comprising the nucleotide sequence referenced as SEQ ID NO:1, or a modification of said nucleotide sequence.

11. (Previously presented) The nucleic acid molecule of claim 10, wherein said nucleotide sequence is selected from the group consisting of SEQ ID NOS:3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23.

12. (Previously presented) A Nope oligonucleotide consisting of between 300 and 350 contiguous nucleotides of SEQ ID NO:1 or the anti-sense strand thereof.

13. (Previously presented) The isolated Nope oligonucleotide of claim 12, wherein said oligonucleotide consists of between 300 and 350 contiguous nucleotides of SEQ ID NO:5 or the anti-sense strand thereof.

14. (Original) A vector comprising an expression element operationally linked to the nucleotide sequence of claim 10.

15. (Previously presented) A host cell comprising the vector of claim 13.

16. (Withdrawn) A method of detecting a Nope nucleic acid molecule in a sample, comprising contacting said sample with a Nope oligonucleotide of claim 12 under conditions allowing specific hybridization to a Nope nucleic acid molecule, and detecting said specific hybridization.

17. (Withdrawn) A method of detecting a Nope nucleic acid molecule in a sample, comprising contacting said sample with a Nope oligonucleotide of claim 13 under conditions allowing specific hybridization to a Nope nucleic acid molecule, and detecting said specific hybridization.

18. (Withdrawn) A method of detecting a Nope nucleic acid molecule in a sample, comprising contacting said sample with two or more Nope oligonucleotides of claim 12, amplifying a nucleic acid molecule, and detecting said amplification.

19. (Withdrawn) The method of claim 18, wherein said amplification is performed using polymerase chain reaction.

20. (Previously presented) A kit comprising one or more Nope oligonucleotides consisting of at least 300 contiguous nucleotides of SEQ ID NO:1 or the anti-sense strand thereof.

21. (Previously presented) The Nope oligonucleotide of claim 12, wherein said oligonucleotide is 300 to 325 contiguous nucleotides of SEQ ID NO:1 or the anti-sense strand thereof.

22. (Previously presented) The Nope oligonucleotide of claim 12, wherein said oligonucleotide is 325 to 350 contiguous nucleotides of SEQ ID NO:1 or the anti-sense strand thereof.

23. (Previously presented) The Nope oligonucleotide of claim 13, wherein said oligonucleotide is 300 to 325 contiguous nucleotides of SEQ ID NO:5 or the anti-sense strand thereof.

24. (Previously presented) The Nope oligonucleotide of claim 13, wherein said oligonucleotide is 325 to 350 contiguous nucleotides of SEQ ID NO:5 or the anti-sense strand thereof.

25. (Previously presented) An isolated nucleic acid molecule encoding a Nope polypeptide amino acid sequence referenced as SEQ ID NO:2.

26. (Previously presented) The isolated nucleic acid molecule of claim 25, said nucleic acid molecule comprising the nucleotide sequence referenced as SEQ ID NO:1.

27. (Previously presented) The nucleic acid molecule of claim 26, wherein said nucleotide sequence is selected from the group consisting of SEQ ID NOS:3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23.

28. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:3.

29. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:5.

30. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:7.

31. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:9.

32. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:11.

33. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:13.

34. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:15.

35. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:17.

36. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:19.

37. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:21.

38. (Previously presented) The nucleic acid molecule of claim 27, wherein said nucleotide sequence is SEQ ID NO:23.

39. (Previously presented) A vector comprising an expression element operationally linked to the nucleotide sequence of claim 25.

40. (Previously presented) A host cell comprising the vector of claim 39.

41. (Previously presented) A vector comprising an expression element operationally linked to the nucleotide sequence of claim 26.

42. (Previously presented) A host cell comprising the vector of claim 41.